ABSTRACT

RGB filter set and color estimation performance for RGB LED color sensing is provided. A criteria function describing an error between desired color matching functions and a spectral response of an RGB filter set is constructed. RGB filter set response

5   characteristics based on the criteria function are then determined. Finally, color estimation parameters for substantially optimal color.estimation with the RGB filter set are determined based upon the determined RGB filter set response characteristics. Computer readable code for constructing a criteria function is provided. Computer readable code for determining RGB filter set response characteristics is also provided. Finally, computer

10   readable code for determining color estimation parameters is provided.